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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,165	07/02/2001	Peter Daute	H3722PCT/US	3060

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EXAMINER	
SHOSHO, CALLIE E	
ART UNIT	**PAPER NUMBER**
1714	

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/807,165	DAUTE ET AL.	
	Examiner	Art Unit	
	Callie E. Shosho	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6,8,9,11 and 13-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6,8,9,11 and 13-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/28/05 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6, 8-9, 11, 15-19, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Carduck et al. (U.S. 5,318,733).

Carduck et al. disclose composition comprising granules containing lubricant wherein the granules have diameter of 0.5-5 mm, preferably 0.8-3 mm, and length to diameter ratio of 1:1 to 3:1. The granules are made by extruding, using a twin-screw extruder, composition comprising

granules into a fine strand, cutting the fine strand into cylindrical granules, and then spheronizing or rounding the cylindrical granules to form spherical granules. The composition is extruded at a temperature of 60-70 ^{0}C and pressure of 25-200 bar. The spheronizing is accomplished using spheronizer having rotating bottom disk using a residence time of 5-120 seconds. It is further disclosed that the granules are treated with active substances either during or after spheronizing (col.2, line 67-col.3, line 9, col.3, lines 47-50, col.5, lines 61-63, col.6, lines 1-2, 8-9, 15-27, and 34-45, col.7, lines 3-7 and 16-24, col.7, line 59-col.8, line 8, col.14, lines 16-35, and col.16, lines 54-57).

In light of the above, it is clear that Carduck et al. anticipate the present claims.

4. Claims 6, 8-9, 11, 13-20, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Semen (U.S. 2005/0006627).

Semen discloses composition comprising granules containing antioxidant and zinc or calcium salts wherein the granules have diameter of 1-5 mm and aspect ratio of 1-5 and include spherical granules. There is further disclosed a method wherein the granular composition is added to plastic composition (paragraphs 2, 9, 28, 32-34, 37, 46, 95, 101, and 112).

In light of the above, it is clear that Semen anticipates the present claims.

5. Claims 6, 8-9, 11, 15-20, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergmann (U.S. 5,723,522).

Bergmann discloses composition comprising granules containing filler as well as flame retardants, lubricants, and UV absorbers wherein the granules have diameter of 1-3 mm and

length of 1-4 mm. Given that the aspect ratio, i.e. ratio of length to diameter, includes ratio of 1:1, it is clear that the granules include spherical granules. There is further disclosed a method wherein the granular composition is added to plastic composition (col.1, lines 8-10 and 13-15, col.1, line 64-col.2, line 2, and col.4, lines 11-22 and 55-56). Attention is drawn to the example (col.5, lines 25-33) utilizing granule possessing diameter of 2 mm and length of 3 mm, i.e. granule is substantially spherical.

In light of the above, it is clear that Bergmann anticipates the present claims.

NOTE: With respect to claims 15-20, it is noted that there is no disclosure in either Semen or Bergmann of how the granular composition is made. That is, while Semen or Bergmann each disclose spherical granules, there is no disclosure that these spherical granules are made by providing cylindrical granules which were produced in a twin screw extruder at certain temperature and pressure conditions followed by spheronizing the cylindrical granules using spheronizer with certain rotational speed and residence time. However, it is noted that "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself". See MPEP 2113.

Thus, although Semen or Bergmann each do not disclose the specific presently claimed process conditions, it is noted that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process", *In re Thorpe*, 777

F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Further, "although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product", *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983).

Therefore, absent evidence of criticality regarding the presently claimed process to make the granular composition and given that each of Semen and Bergmann meets the requirements of the claimed granular composition, i.e. composition comprising spherical granules, Semen and Bergmann each clearly meet the requirements of present claims 15-20.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carduck et al. (U.S. 5,318,733) in view of Reynolds (U.S. 3,741,703).

The disclosure with respect to Carduck et al. in paragraph 3 above is incorporated here by reference.

The difference between Carduck et al. and the present claimed invention is the requirement in the claims of the rotational speed at which spheronizing is performed.

Carduck et al. disclose spheronizing cylindrical granules using spheronizer with rotating bottom disk with residence time of 15-120 seconds, however, there is no disclosure of the rotational speed at which spheronizing is performed.

Reynolds, which is drawn to apparatus for making spherical granules, discloses using spheronizer with rotating bottom disk at rotating speed of 30-1500 rpm wherein the speed utilized controls the uniformity of size of the spheres produced (col.1, lines 1-7, col.4, lines 16-40, and col.5, lines 14-20).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use spheronizer with rotating speed, including that presently claimed, in Carduck et al. in order to produce spherical granules with uniform size, and thereby arrive at the claimed invention.

Response to Arguments

9. Applicants' arguments regarding Dorfel et al. (U.S. 4,310,483) and Balliello et al. (U.S. 6,423,132) have been considered but they are moot in view of the discontinuation of the use of these references against the present claims.

10. Applicants' arguments filed 2/28/05 have been fully considered but, with the exception of arguments relating to Dorfel et al. and Balliello et al., they are not persuasive.

Specifically, applicants argue that Carduck et al. is not a relevant reference against the present claims given that Carduck et al. do not disclose plastic additive as presently claimed. Applicants note that although Carduck et al. disclose the use of granules comprising plasticizer or lubricant, the plasticizer or lubricant is not a plastic additive as used by applicants.

It is agreed that there is no explicit disclosure in Carduck et al. that either the plasticizer or lubricant is a plastic additive. However, although the plasticizer or lubricant is not referred to as a plastic additive, the fact remains that Carduck et al. disclose granule comprising plasticizer or lubricant. That is, regardless of what the plasticizer or lubricant is called in Carduck et al., given that present claim 6 is drawn to a composition comprising granule containing plasticizer or

lubricant and given that Carduck et al. disclose composition comprising such granule, it is clear that Carduck et al. meets the requirements of present claims 6, 8-9, 11, 15-19, and 21-23.

With respect to present claim 25, which is drawn to a method, it is noted that Carduck et al. is not utilized against present claim 25 given that there is no disclosure of adding the granule composition to a plastic composition.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
10/21/05